

Chemistry Performance Indicators

Students will master the following standards based performance indicators through in-class lecture, homework, and lab work. Units are divided into related topics, where order and pace may vary according to student response to the material.

After completing CP Chemistry students will be able to:

- A) interpret the structure of the Periodic Table and use it to obtain information
- B) classify a substance as an element, compound, or mixture
- C) analyze and compare physical and chemical properties of matter
- D) describe the composition of matter in terms of atoms and subatomic particles
- E) apply the mole concept to the meaning and uses of chemical equations
- F) recognize how the configuration of electrons governs the chemical properties of an element
- G) explain how chemical bonding occurs and compare types of bonds
- H) describe how substances chemically react to form new substances with different properties
- I) use stoichiometry to quantify relationships between products and reactants
- J) describe and apply principles that effect the rate of chemical reactions
- K) attribute a state of matter to its molecular arrangement and freedom of motion
- L) illustrate how molecules are consistently arranged in geometric patterns
- M) exemplify principles of ideal gas behavior
- N) analyze aqueous solutions in terms of concentration, colligative properties, and solubility
- O) exemplify basic acid/ base chemistry principles
- P) calculate the energy relationships that occur during physical and chemical changes
- Q) (nuclear reactions)